

On a Malformation in Echinus Flemingii, Ball.

By THOS. HOWARD STEWART, Esq.

To the Editors of the Annals of Natural History.

GENTLEMEN,—Having lately received from the Devonshire coast a specimen of that beautiful British Echinoderm *Echinus Flemingii*, which possesses a curious malformation, I have thought it worth while to place it on record.

The ant-ambulacral ring of plates surrounding the anus is composed in the Cidariadæ and Echiniadæ of ten plates—five genital and five intergenital; the latter are perforated with a small orifice, in which the aquiferous canal terminates; the former have each a single large foramen communicating with the genital tube for the exit of the ova or spermatic fluid, as the case may be.

But, in the specimen I am now alluding to, that part of the genital plate where the single orifice is usually situated is raised into a papilla, and surrounded with five orifices, with the exception of that on the madreporic plate, which has only three.

Unfortunately the animal was eviscerated before this curious malformation was observed, so that the state of the ducts cannot be further investigated.

The remainder of the corona is somewhat slightly malformed; the anal orifice is about a quarter of an inch out of its normal position, and there is a considerable depression in the corona all round at about an inch from the ant-ambulacral ring. The specimen was obtained from about 40 fathoms depth, in the English Channel, off the Devonshire coast.

I remain, Gentlemen,

Royal Coll. of Surgeons,
March 15, 1860.

Yours, &c.,

THOS. HOWARD STEWART.

On the Sclerogenous Granules of the Berry of Arbutus Unedo.

By GEORGE GULLIVER, F.R.S.

I know not whether these granules have ever been described, either in the fruit of the Strawberry-tree or in that of any other heathwort, and am induced to notice them in the hope that botanists, who may have the opportunity, will observe whether they exist in any allied species. Should the granules be regularly present in the fruit, as I believe, and prove peculiar to this interesting tree, they will afford for it a new, very simple, plain, and durable distinctive character.

The granules are very dense and hard, rounded, of a whitish colour when cleaned, scarcely as big as poppy-seed, and are scattered throughout the pulp of the fruit, within the cells of which they seem to originate. But, though so much smaller than the seeds of the *Arbutus*, the granules greatly exceed the seeds of the same berry in number and weight.

The structure of the granules is the same as that of the gritty tissue of the Pear, described and figured by Professor Quekett (Lec-